



GOVERNMENT COLLEGE OF ENGINEERING, JALGAON

(An Autonomous Institute of Government of Maharashtra)

National Highway No.6, JALGAON – 425 002

Phone No.: 0257-2281522

Fax No.: 0257-2281319

Website : www.gcoej.ac.in

E-mail : princoej@redifmail.com



Name of Examination : **Summer 2021** - (Preview)

Course Code & Course Name : **ME355UA - Power Plant Engineering**

Generated At : **19-04-2022 12:57:39**

Maximum Marks : **60**

Duration : **3 Hrs**

[Edit](#) [Print](#) [View Answer Key](#) [Close](#) **Answer Key Submission Type:** Marking scheme with model answers and solutions of numerical

Instructions:

1. All questions are compulsory.
2. Illustrate your answer with suitable figures/sketches wherever necessary.
3. Assume suitable additional data; if required.
4. Use of logarithmic table, drawing instruments and non programmable calculators is allowed.
5. Figures to the right indicate full marks.

1) Solve any five sub questions

- a) What are the various stages in coal handling. [3]
- b) What are the different draught losses. [3]
- c) What is clearance volume and swept volume in I. C. engines. [3]
- d) What are the methods for improvement of thermal efficiency of open cycle gas turbine plant. [3]
- e) What are the points to be considered for site selection of hydroelectric power plant. [3]
- f) What is chain reaction in nuclear power plant. [3]

2) Solve any three sub questions

- a) What are the essential components of nuclear reactor. Explain the function of each. [5]
- b) What is load curves ? Explain significance of load curves. [5]
- c) What are the causes of heat loss in steam generators. Explain in detail. [5]
- d) Explain ocean thermal energy conversion plant in detail. [5]

3) Solve any three sub questions

- a) Explain any two biomass conversion processes. [5]
- b) What are the different types of surge tanks used in hydroelectric plant. Explain any one of them. [5]
- c) Explain liquid metal cooled reactor in detail. [5]
- d) What are the factors affecting economics of generation and distribution of power. Explain. [5]

4) Solve any three sub questions

- a) Explain fluidised bed combustion in detail. [5]
- b) Give the comparison between flat plate and focusing solar collector. [5]
- c) What are the points to be considered for selection of site for nuclear power plant. Explain. [5]
- d) What are the methods used for feed water treatment in thermal power plant .Explain [5]

Auto Generated by SsOES v6.2